

The Impact of Gender Diversity in Top Management on Firm Performance

Hanyu Lu *

School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China

* Corresponding Author Email: lluhanyu@163.com

Abstract. This paper provides a comprehensive systematic literature review of the existing research on the impact of gender diversity in top management team on firm financial and non-financial performance. This paper summarizes the studies on the impact of gender diversity in TMT on performance through a systematic literature review. Firstly, this paper present the theoretical basis used to describe the relationship between them, and highlight the significance of the complexity perspective to address the limitation of measuring firm financial performance intently as a function of gender diversity in top management team from a singular theoretical perspective. Further, this paper review empirical literature on the relationship between gender diversity in top management team and corporate financial and non-financial performance, and discussed both positive and negative impacts in financial performance. Finally, based on the results of literature review, this paper present the conclusion and future research recommendations.

Keywords: Gender diversity, TMT research, firm performance.

1. Background

In recent decades, with the continuous development of technology and economy, and the continuous progress of society, female practitioners have played an increasingly important role. However, according to a business survey released by Catalyst, a non-governmental organization in the United States that studies women's issues, in 2022, female workers globally accounted for approximately 38.8% of the total workforce in 2021. However, influenced by traditional beliefs such as 'a woman without talent is virtuous' and 'a virtuous wife and mother', most enterprises in China are still dominated by men: women account for less than 15% of senior management personnel in China. Globally, the proportion of female executives is almost always below 30%. In 2020, the proportion of female directors worldwide was 20.6%. Among the Fortune 500 companies, there are only 13 (2.6%) female CEOs, all of whom are white women. Even in the United States, where the market economy and businesses is thriving, and the so-called "freedom and equality" is prevalent, the proportion of women in the top management team (TMT) of the S&P 500 is only 30%, and the increase in this proportion is very slow[1]. This indicates that although women's positions are constantly changing and advancing, their position in the leadership of the enterprise remains unchanged. All of these are like an invisible "glass ceiling" that to some extent hinders women's further development.

The development of women in the economy and society affect not only themselves, but also the free and comprehensive development of all humanity. This is a common issue for all humanity. However, in the academic community, articles on gender diversity in TMT have not received sufficient attention both domestically and internationally. A series of questions require our attention: How do female executives affect various dimensions of firm performance? Which type of performance is mostly affected? Is this impact positive or negative? How does this impact work? How can we maximize the value of female leaders? If female executives and senior managers can indeed add sustainable value to the enterprise with their unique gender advantages, then the enterprise should design an effective senior management talent appointment system that consciously encourages and enhancing gender diversity in the TMT.

Many scholars have explored the association between them in various ways. Most of the results confirmed that gender diversity in top management teams does have a positive impact on corporate performance. But some studies show that the relationship between them is not significant or negative. Some studies also explored the reasons behind the relationship between women's participation in the executive team and enterprise performance. The key objective of this paper, therefore, is to contribute to the extant literature by addressing the above questions via an up-to-date and comprehensive systematic literature review of the existing research on gender diversity in TMT and firm financial and non-financial performance.

We argue that this research is important to a variety of key groups in society. First and more specifically, the composition of a TMT and its effect on corporate outcomes is important to a wide variety of stakeholders, such as employees, governments, managers and shareholders of a company. Second and more broadly, this research is not only relevant to companies, but also to the economies of countries and their relevant national institutions responsible for the formulation and administration of policies and laws affecting corporate board composition. For example, systematic knowledge on the set of individual-, social-, firm- and country-level factors that facilitate or impede the extent to which women are appointed to TMT around the world, and their effect on companies and economies in general, can provide an impetus for changes in policies/laws to support women's participation in economies in a long-term and sustainable way.

The following sections are organized: Section 2 presents the overview of theoretical researches, and Section 3 presents various empirical strands in the literature and an explanatory framework. In Sections 4, I present the conclusion and future research recommendations.

2. Overview of Theoretical Researches

In early research, scholars mostly relied on Hambrick& Mason's upper echelons theory as the theoretical foundation, treating female executives as a branch of TMT research, and conducting research on female executives from the perspective of gender diversity in executive teams[2]. With the gradual deepening of research, the theoretical perspective on which the research is based has been greatly expanded. At present, scholars have widely used a series of theories, such as critical mass theory, agency theory, resource dependence theory, social theory of mind, gender differences theory, to explore the relationship between female executives and corporate performance, as well as what transmission mechanism female executives use to affect corporate performance.

2.1. Tokenism and Critical Mass Theory

Kanter introduced the theory of Tokenism and Critical Mass Theory, supporting the critical mass theory. The opportunity for advancement is based on related social groups, and these groups are based on race and gender [3]. Masculine principles dominate many business entities. This means that gender is an implication of token, and females in this context are dysfunctional in the corporation. In this case, a token in board gender diversity means a single female manager or board member who is considered a representative of the female category. The representation of females on top is a token, and to some degree, it is a solo [4]. The contribution of these female managers is limited because she does not have full participation in decision-making. In some organizations, the female director is appointed to submit to the set legislative requirement on gender balance [3].

A case of tokenism is the fall of Enron Company in 1998; it had only one female director sitting in a board of directors (BOD) consisting of seventeen male directors. When there is a gender imbalance, the influence of the token female manager on the board is minimal [5]. The image distortion that is made in single-gender management is inconsistent with public perception. It is argued that females in banks dominate in lower ranks, which generally have fewer opportunities. Based on the behavioral effects of opportunities and power, males in lower ranks and limited opportunities tend to act like females in the same position and ranks. The general belief is that females are viewed as communal and possess the qualities of the leader.

The critical mass theory is based on the classical analysis of absolute numbers in management and emphasizes this relative number [6]. The theory argues that gender should have significant representation to make its contribution heard and make a difference in decision-making. According to the critical mass theory, there are four categories of female and male compositions in management. These groupings include uniform group or homogeneous group where the members of senior management share some characteristics that are male or female-only; a skewed group where the board has minority representation; a titled group where the minority has a relatively high balance and a balanced group where the minority gender is made up of about 40% of the total representation. When the number of minorities in this skewed composition of senior management increases in relative proportion towards the titled group or the balance group, there is a distinct group [3].

The representation of females in a balanced or even a titled group brings their perspective, knowledge, value, and skills to contribute to group discussions and improve the board's process and formulation's effectiveness. Despite this, there is a concern about enough gender representation to make a difference in decision making. One lady's presence is a token, and when the number increases, it becomes a voice. The increase in number means that the board decision-making is gender-conscious, and the female managers are not seen as outsiders. Based on the critical mass theory, Nguyen, Locke, and Reddy show that the critical mass of female senior management members is best achieved when there are more than five directors on the boards. Dezsö and Ross indicate that about thirty percent of the minority group in management make a difference. Kundu and Mor suggest that there is a "significant and positive relationship between the number of female directors and the innovation of board performance when there are more than three directors." This means that there is a positive effect on the increase in female managers' mass in a company's financial performance. Gender discrimination reduces employee motivation, satisfaction, and commitment level and increases employees' stress levels. The gender-balanced has an undesirable effect on bank "return on equity (ROE)" before the critical representation of the female gender is reached. The disadvantages of opportunities at work and lower status can affect women psychologically, reduce job satisfaction and organizational commitment, and, ultimately, impact their performance [7]. From this critical mass theory, the management should have a significant number of female representations referred to as the female's critical mass to impact financial performance.

2.2. Agency Theory

The agency theory's underlying concept is a conflict of interest between directors' team and shareholders, where the managers are concerned about their interest[9]. Agency theory is a consistent theoretical approach and shows the importance of gender inclusion in an organization. Agency theory argues that gender-balanced BOD enhances the functions of the management team. The diversity of BOD reduces cases of opportunistic actions of the management team by giving the correct information. The control and monitoring of the board's functions on the management team are essential in reducing principal-agent conflicts. Oyotode-Adebile and Raja support that gender-balanced BOD is effective in strategic decision making and setting the bank's policies[10]. Birindelli, Iannuzzi, and Savioli also believe that banks with a high proportion of female CEOs present lower agency costs in areas with less competitive markets[11]. The independence issues of gender diversity in the board reduce the agency costs by working diligently compared to directors closer to the management team. In the same light, gender diversity improves the BOD' independence because the female members come up with different experiences and perspectives that encourage them to question some practices and not conform to conventional ways of doing things[10]. This means that boards of directors who have a high gender balance are more independent than boards of lower female members. Gender balances reduce the effects of the good-old-boys syndrome; hence diversity creates better monitoring of the management team.

According to Oyotode-Adebile and Rogish, gender-balanced management is useful in directing information and improving public disclosures on business operations[10][12]. Gender diversity in senior positions helps the company monitoring management activities more effectively[13].

Unfortunately, in many cases, women leaders are marginalized by male leaders, and the efforts of women leaders are readily disregarded in decision-making. Consequently, the board's gender inclusion and balance may not improve the board's functionality if the female directors are marginalized and subjected to tokenism.

2.3. Resource Dependence Theory

The dominant use of the above agency theory has resulted in conflicting positions on the issue of inclusion. Resource dependence theory is more convincing in the business case for gender diversity. Pfeffer developed the theory at 1994, and he indicated that business underperformance an open system in which their survival or success is dependent on the resources and the external environment[14]. The resource dependence theory supporters further argue that an essential link between business and its resources and environmental dependencies. According to Pfeffer, BOD provides several essential resources for any business. These resources include; channels of communication, legitimizing business, and establishing a business network with other institutions. The directors include; insiders, support specialists, business experts, and influential community roles. The support specialist is the banking industry's professional, and the community influencer is a leader in academia or government departments (Pfeffer, 1994). As the directors give access to a different business resource for the bank, the gender-balanced boards tend to expand the BOD profile and create a link with necessary external and internal resources.

Management's function is to give the linkage between the external environment and the business to create economic benefits. This implies that the board should attain mixed skills, expertise, knowledge, and experience in different areas to create a competitive advantage. Considering the merits of gender diversity in senior management, several studies have evolved from the dependence theory, and it can be concluded that board diversity is the value of the business. It creates a competitive advantage within the management. According to Bart, management's heterogeneity causes improved decision making due to more great innovation and knowledge base. This improves the competitive advantage for the bank. It is also argued that cognitive conflicts in a gender-balanced group create innovative solutions. High-quality decision-making processes positively influence management and business, and these have positive effects on financial performance. The four primary resources in gender-inclusive management include different perspectives, knowledge, skills, and experience[15]. These unique and critical resources of female managers and directors can be different from their male counterparts, more so in a diverse environment, and this difference is essential in handling business uncertainty. The addition of female managers' business resources is an open opportunity for banks to easily enter new markets.

2.4. Gender Differences Theory

This theory is based on the recognition that males and females are different in their leadership and behavior. Several studies ascertain the headship role of men as argotic and ladies as communal characters [16] [17]. The egos males have become more self-confident and assertive, while female leaders tend to have common attributes such as democratic participation, speaking tentatively, and less autocratic. Concerning gender diversity and inclusion in the banking industry, this theory implies that employing women in senior positions with different experiences can result in different working principles. Intrinsic characters of female managers add value to the board; they offer different working perspectives. Gender balance and management teams are more effective in solving different natured problems. A research shows that a gender-balanced management team takes part in deep conversations compared to a board of management, which is male-dominated. A study by Luanglath, Ali, and Mohannak show that there is "no difference between females and males in terms of management." [18] However, in some situations, they have skills and behaviors which are diametrically opposite.

In some research on risk-taking, it is generally agreed that females tend to shy away from risky ventures, unlike men. A study found that women are fewer risk-takers than males, and they are less

likely to venture into risky experiences.^[19] Females make conservative choices in business and investment. Females who are involved in male disciplines such as engineering, economics, and finance are different from the general population. Females have a higher confidence level in specific fields, indicating that females exposed to similar experiences and education are confident like males.

2.5. Summary

It was observed that a few studies indicated a theoretical link between their findings and theoretical perspectives. Studies can improve their contribution by critically commenting on applied theories that consider their findings. We also discovered that a single theoretical perspective limits studies investigating the multifaceted relationship between gender diversity in TMT and firm performance. For instance, agency, legitimacy, resource dependence, and stakeholder perspectives show clear limitations in highlighting the association between corporate governance and CSR disclosure [20]. On the contrary, few studies have adopted multiple theoretical perspectives to encapsulate the dynamics of gender diversity in TMT and firm performance.

3. Overview of Empirical Researches

3.1. Gender diversity in TMT and firm financial performance

3.1.1. Positive impact of gender diversity in TMT on firm performance

The seminal work of Frink indicated that Gender diversity in TMT is particularly effective in specific industries (for instance, service industries). While ineffective in others (for instance, light and heavy manufacturing industries)[21]. Further, they argued that in light and heavy industries, the key skills needed are physical, endurance-based, and dexterity based, thus, the minimalistic impact of Gender diversity in TMT. Similarly, Francoeur suggested that firms operating in competitive markets perform better when the proportion of women managers is high[22]. Further, Conyon and He specified that Gender diversity in TMT is more common in high-performing firms than in low-performing ones[23]. Zhang also indicated that the association between firm performance and Gender diversity in TMT is considerable across economies and industries subject to institutional and regulatory frameworks[24].

It can be argued that the impact of Gender diversity in TMT on firm performance varies across different contexts, thus lacking a common consensus amongst studies. For instance, it is indicated in the literature that in emerging markets, Gender diversity in TMT benefits firms' performance in hindsight because of potential financial opacity and an increased level of information asymmetry[25]. In contrast, a negative impact has been reported in a developed country due to over-monitoring, which causes delays in decision-making. In many emerging economies, the mandatory inclusion of women directors has been introduced recently[26]. Furthermore, it has been reported that the mere presence of women does not affect firm performance; the critical mass of women directors has an incremental benefit on firm performance[27]. Further, Zhang indicated that board Gender diversity in TMT impacts a firm's performance positively only if Gender diversity is normatively accepted in firms.

Nevertheless, another facet of the literature validates the possible interaction between Gender diversity in TMT and firm performance via mediation. For instance, Galbreath points towards the positive impact of Gender diversity and firm performance with the mediation of corporation social responsibility (CSR), indicating that gender-diverse boards are linked to CSR and CSR is linked to financial performance [27]. Similarly, Fernando reported the positive impact of gender diversity on firm performance via the mediation of managerial abilities, pointing towards transformational leadership in contemporary organizations [28].

3.1.2. Negative impact of gender diversity in TMT on firm performance

According to Adams and Ferreira, gender diversity hurts company performance. First, they indicated that a mandatory women's quota on corporate boards negatively impacts firm performance, reducing shareholder value. Second, they pointed towards over-monitoring on gender-diverse boards,

which impedes rather than facilitates core organizational activities. On the contrary, Joecks used a critical mass perspective to categorize the gender representation in token or critical thresholds and established that the negative association is only observed if the minority gender group is less than 30% of the total board size, whilst the same association reverts to positive when the percentage is more than 30%, thus achieving the critical threshold [29].

Although Joecks used robust theoretical and methodological measures, there are limitations. For instance, the analysis is based on an abbreviated period (5 years). Second, the study's sample was limited to German firms entailing two-tiered, co-determined managerial boards. Thus, the generalizability of the results to other contexts is limited. Chapple and Humphrey also reported a negative (but weak) association between BGD and firm performance using a portfolio approach for Australian firms [29].

Moreover, via empirical evidence, Chapple and Humphrey indicated that a firm's size (directly) and risk (indirectly) are associated with diversity on boards. Only large firms can accommodate more than a one-woman director. Thus pointing towards size, affordability, and diversity associations for larger firms. Finally, they indicated that in some industries (for instance, basic materials and consumer goods), at least a one-woman director is linked to higher returns. Solakoglu also indicated the industry-dependent association of gender diversity in TMT and performance, that is, manufacturing firms respond positively, whilst non-manufacturing firms respond negatively to gender diversity in TMT in Turkish firms [30].

3.2. Gender diversity in TMT and firm non-financial performance

3.2.1. CSR

This section presents a review of studies relating to the effect of gender diversity in TMT on various measures of CSR. Generally, numerous empirical studies are based on existing CSR databases in several countries such as the US [31], China [32], and emerging economies [33], whereas fewer researchers adopt manual data collection of CSR measures.

Most studies find a positive relationship between gender diversity in TMT and CSR. In particular, female directors are related to less corporate fraud[34][35], less aggressive tax avoidance activities[36][37], fewer financial restatements [38], and more donations [39]. In addition, gender diversity in TMT have been found to show greater responsibility towards the environment, for example, by reducing carbon emissions, managing water resources more effectively, and avoiding being convicted of environmental offences [39]. Furthermore, female board members require firms to provide more information on risk [40], security markets, corporate governance [41], the environment [42] and CSR [43] [44].

3.2.2. Corporate reputation

Several studies investigate the effect of gender diversity in TMT on corporate reputation and find different results[45]. The review of these studies shows that the differences in findings to be explained by differences in context and methodological approaches, such as sampling and statistical methods. The other main factor that accounts for the differences in findings is the variables that moderate or mediate the effect of gender diversity in TMT on corporate outcomes. For instance, industry, innovation and reputation mediated the relationship between gender-diverse boards and firm performance[46]. CSR and firm's sector provide the context wherein we can observe the link between female board representation and firm reputation. Particularly, Brammer mentioned that female board members bring a good reputation to firms in the consumer service sector, reduce the reputation of producer services firms, and have no impact on a firm's reputation in other industries[47].

4. Recommendations for future research

From an academic viewpoint, my work carries several academic recommendations for future research. First, the association between gender diversity in TMT and firm performance cannot be

analyzed using a singular theoretical perspective, which leads to methodology anomalies that study the association in isolation (for instance, multiple linear regressions). On the contrary, qualitative comparative analysis, a methodology rooted in a complexity perspective, studies the complex system by contemplating the association in combination with other board and firm characteristics. Thus, the need for a complexity framework is paramount to address the limitation of measuring firm financial performance intently as a function of gender diversity in TMT from a singular theoretical perspective.

Second, future research should use psychological and behavioral perspectives to better understand the antecedents of gender diversity in TMT and use survey and interview-based research designs to encapsulate the team and individual attributes of gender diversity in TMT.

Third, it was also observed that limited studies investigated the impact of gender diversity in TMT on non-financial performance using non-linear regression specifications.

Fourth, based on our review, I suggest that future research should consider cultural differences in order to understand the impact of gender diversity in TMT on a firm's financial performance.

References

- [1] Women in the workforce – global: Quick Take. (2021, February 11). Catalyst
- [2] Hambrick D C, Mason P A. Upper echelons: The organization as a reflection of its top managers [J]. *Academy of management review*, 1984, 9(2): 193-206.
- [3] Wiley, C., & Monllor-Tormos, M. (2018). Board gender diversity in the STEM&F sectors: the critical mass required to drive firm performance. *Journal of Leadership & Organizational Studies*, 25(3), 290-308.
- [4] Kanter, R. M. (1977). Some effects of proportions on group life. In *The gender gap in psychotherapy* (pp. 53-78). Springer, Boston, MA.
- [5] Owen, A. L., & Temesvary, J. (2019). Gender diversity on bank board of directors and performance (No. 2019-02-12). Board of Governors of the Federal Reserve System (US)
- [6] Kellner, D. (1989). *Critical theory, Marxism, and modernity* (p. 173). Cambridge: Polity Press.
- [7] Kundu S C, Bansal J, Mor A, et al. Workforce Diversity Status in Indian Public Sector: A Study of Employees Reactions [J]. *Journal of Organisation and Human Behaviour*, 2018, 7(2&3): 34.
- [8] Stamarski C S, Son Hing L S. Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers' sexism [J]. *Frontiers in psychology*, 2015, 6: 1400.
- [9] Bower J L, Paine L S. The error at the heart of corporate leadership [J]. *HBR'S 10 MUST*, 2017, 165.
- [10] Oyotode- Adebile R M, Raja Z A. Board gender diversity and US corporate bonds [J]. *International Journal of Managerial Finance*, 2019, 15(5): 771-791.
- [11] Birindelli G, Iannuzzi A P, Savioli M. The impact of women leaders on environmental performance: Evidence on gender diversity in banks [J]. *Corporate Social Responsibility and Environmental Management*, 2019, 26(6): 1485-1499.
- [12] Rogish A, Sandler S, Shemluck N, et al. Within reach? Achieving gender equity in financial services leadership [J]. *Deloitte Insights*, 2019, 5.
- [13] Sabatier M. A women's boom in the boardroom: effects on performance? [J]. *Applied Economics*, 2015, 47(26): 2717-2727.
- [14] Pfeffer J. *Competitive advantage through people* [J]. Boston/Mass, 1994.
- [15] *Creating Gender-inclusive Organizations: Lessons from Research and Practice* [M]. University of Toronto Press, 2020.
- [16] Byron K, Post C. Women on boards of directors and corporate social performance: A meta-analysis [J]. *Corporate Governance: An International Review*, 2016, 24(4): 428-442.
- [17] Terjesen S, Couto E B, Francisco P M. Does the presence of independent and female director's impact firm performance? A multi-country study of board diversity [J]. *Journal of Management & Governance*, 2016, 20: 447-483.
- [18] Luanglath N, Ali M, Mohannak K. Top management team gender diversity and productivity: the role of board gender diversity [J]. *Equality, Diversity and Inclusion: An International Journal*, 2019.

- [19] Campbell K, Minguez Vera A. Female board appointments and firm valuation: Short and long-term effects [J]. *Journal of Management & Governance*, 2010, 14: 37-59.
- [20] Ntim C G, Soobaroyen T. Corporate governance and performance in socially responsible corporations: New empirical insights from a Neo-Institutional framework [J]. *Corporate Governance: An International Review*, 2013, 21(5): 468-494.
- [21] Frink D D, Robinson R K, Reithel B, et al. Gender demography and organization performance: A two-study investigation with convergence[J]. *Group & Organization Management*, 2003, 28(1): 127-147.
- [22] Francoeur C, Labelle R, Sinclair-Desgagné B. Gender diversity in corporate governance and top management [J]. *Journal of business ethics*, 2008, 81: 83-95.
- [23] Conyon M J, He L. Firm performance and boardroom gender diversity: A quantile regression approach [J]. *Journal of Business Research*, 2017, 79: 198-211.
- [24] Zhang L. An institutional approach to gender diversity and firm performance [J]. *Organization Science*, 2020, 31(2): 439-457.
- [25] Al-Jaifi H A. Board gender diversity and environmental, social and corporate governance performance: evidence from ASEAN banks [J]. *Asia-Pacific Journal of Business Administration*, 2020, 12(3/4): 269-281.
- [26] Chen S, Ni X, Tong J Y. Gender diversity in the boardroom and risk management: A case of R&D investment [J]. *Journal of Business Ethics*, 2016, 136: 599-621.
- [27] Arun T G, Almahrog Y E, Aribi Z A. Female directors and earnings management: Evidence from UK companies [J]. *International Review of Financial Analysis*, 2015, 39: 137-146.
- [28] Fernando G D, Jain S S, Tripathy A. This cloud has a silver lining: Gender diversity, managerial ability, and firm performance [J]. *Journal of business research*, 2020, 117: 484-496.
- [29] Joecks J, Pull K, Vetter K. Gender diversity in the boardroom and firm performance: What exactly constitutes a “critical mass?”[J]. *Journal of business ethics*, 2013, 118: 61-72.
- [30] Solakoglu M N. The role of gender diversity on firm performance: a regression quantile approach [J]. *Applied Economics Letters*, 2013, 20(17): 1562-1566.
- [31] Zhang J Q, Zhu H, Ding H. Board composition and corporate social responsibility: An empirical investigation in the post Sarbanes-Oxley era [J]. *Journal of business ethics*, 2013, 114: 381-392.
- [32] McGuinness P B, Vieito J P, Wang M. The role of board gender and foreign ownership in the CSR performance of Chinese listed firms [J]. *Journal of Corporate Finance*, 2017, 42: 75-99.
- [33] Yasser Q R, Al Mamun A, Ahmed I. Corporate social responsibility and gender diversity: Insights from Asia Pacific [J]. *Corporate Social Responsibility and Environmental Management*, 2017, 24(3): 210-221.
- [34] Capezio A, Mavisakalyan A. Women in the boardroom and fraud: Evidence from Australia [J]. *Australian Journal of Management*, 2016, 41(4): 719-734.
- [35] Lenard M J, Yu B, York E A, et al. Female business leaders and the incidence of fraud litigation[J]. *Managerial Finance*, 2017, 43(1): 59-75.
- [36] Lanis R, Richardson G. Corporate social responsibility and tax aggressiveness: An empirical analysis [J]. *Journal of Accounting and Public policy*, 2012, 31(1): 86-108.
- [37] Francis B B, Hasan I, Wu Q, et al. Are female CFOs less tax aggressive? Evidence from tax aggressiveness [J]. *The Journal of the American Taxation Association*, 2014, 36(2): 171-202.
- [38] Abbott L J, Parker S, Presley T J. Female board presence and the likelihood of financial restatement [J]. *Accounting Horizons*, 2012, 26(4): 607-629.
- [39] Jia, M., Zhang, Z. Critical Mass of Women on BODs, Multiple Identities, and Corporate Philanthropic Disaster Response: Evidence from Privately Owned Chinese Firms. *J Bus Ethics*, 2013,118, 303–317.
- [40] Saggarr R, Singh B. Corporate governance and risk reporting: Indian evidence [J]. *Managerial Auditing Journal*, 2017.
- [41] Elmagrhi M H, Ntim C G, Wang Y. Antecedents of voluntary corporate governance disclosure: A post-2007/08 financial crisis evidence from the influential UK Combined Code [J]. *Corporate Governance*, 2016, 16(3): 507-538.e
- [42] Hollindale J, Kent P, Routledge J, et al. Women on boards and greenhouse gas emission disclosures [J]. *Accounting & Finance*, 2019, 59(1): 277-308.

- [43] Elmagrhi M H, Ntim C G, Wang Y. Antecedents of voluntary corporate governance disclosure: A post-2007/08 financial crisis evidence from the influential UK Combined Code [J]. *Corporate Governance*, 2016, 16(3): 507-538.
- [44] Nekhili M, Nagati H, Chtioui T, et al. Corporate social responsibility disclosure and market value: Family versus nonfamily firms [J]. *Journal of Business Research*, 2017, 77: 41-52.
- [45] De Anca C, Gabaldon P. The media impact of board member appointments in Spanish-listed companies: A gender perspective [J]. *Journal of Business Ethics*, 2014, 122: 425-438.
- [46] Miller T, del Carmen Triana M. Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship [J]. *Journal of Management studies*, 2009, 46(5): 755-786.
- [47] Walker, Helen, and Stephen Brammer. "Sustainable procurement in the United Kingdom public sector." *Supply Chain Management: An International Journal* 14.2 (2009): 128-137.